

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1 1. (Currently amended) A method of diagnosing or predicting susceptibility
2 to a clinical subtype of Crohn's disease characterized by fibrostenosing disease independent of
3 small bowel involvement, comprising:
4 determining the presence or absence in an individual of a fibrostenosis-
5 predisposing allele ~~linked to a NOD2/CARD15 locus~~, wherein said fibrostenosis-predisposing
6 allele is an insertion of a G at position 248 of SEQ ID NO:5 or an insertion of a C at position 294
7 of SEQ ID NO:6 (SNP 13),
8 wherein the presence of said fibrostenosis-predisposing allele is diagnostic of or
9 predictive of susceptibility to the clinical subtype of Crohn's disease characterized by
10 fibrostenosing disease independent of small bowel involvement.
- 1 2. (Canceled)
- 1 3. (Canceled)
- 1 4. (Currently amended) The method of claim ~~[[3]]~~ 1, wherein NF-kappa B
2 activation by a NOD2/CARD15 polypeptide encoded by said fibrostenosis-predisposing allele is
3 reduced as compared to NF-kappa B activation by a wild-type NOD2/CARD15 polypeptide.
- 1 5. (Canceled)
- 1 6. (Canceled)
- 1 7. (Canceled)
- 1 8. (Canceled)

- 1 9. (Canceled)
- 1 10. (Canceled)
- 1 11. (Canceled)
- 1 12. (Canceled)
- 1 13. (Canceled)
- 1 14. (Canceled)
- 1 15. (Canceled)
- 1 16. (Currently amended) The method of claim 1, wherein said fibrostenosis-
2 predisposing allele is associated with said clinical subtype of Crohn's disease characterized by
3 fibrostenosing disease independent of small bowel involvement with an odds ratio of at least 2
4 and a lower 95% confidence limit greater than 1.
- 1 17. (Original) The method of claim 1, further comprising generating a report
2 indicating the presence or absence in said individual of said fibrostenosis-predisposing allele.
- 1 18. (Currently amended) The method of claim 1, further comprising
2 generating a report indicating the presence or absence in said individual of said clinical subtype
3 of Crohn's disease characterized by fibrostenosing disease independent of small bowel
4 involvement.
- 1 19. (Original) The method of claim 1, wherein determining the presence or
2 absence of said fibrostenosis-predisposing allele comprises enzymatic amplification of nucleic
3 acid from said individual.
- 1 20. (Original) The method of claim 19, wherein said amplification is
2 polymerase chain reaction amplification.

1 21. (Original) The method of claim 20, wherein said polymerase chain
2 reaction amplification is performed using one or more fluorescently labeled probes.

1 22. (Currently amended) The method of claim 20, wherein said polymerase
2 chain reaction amplification is performed using one or more probes comprising a DNA minor
3 ~~grove~~ groove binder.

1 23. (Currently amended) A method of optimizing therapy in an individual,
2 comprising:

3 (a) determining the presence or absence in said individual of a fibrostenosis-
4 predisposing allele ~~linked to a NOD2/CARD15 locus, wherein said fibrostenosis-predisposing~~
5 allele is an insertion of a G at position 248 of SEQ ID NO:5 or an insertion of a C at position 294
6 of SEQ ID NO:6 (SNP 13),

7 (b) diagnosing individuals in which said fibrostenosis-predisposing allele is
8 present as having a fibrostenosing subtype of Crohn's disease, and

9 (c) treating said individual having a fibrostenosing subtype of Crohn's disease
10 based on said diagnosis.

1 24. (New) The method of claim 23, wherein said fibrostenosis-predisposing
2 allele is associated with said clinical subtype of Crohn's disease characterized by fibrostenosing
3 disease independent of small bowel involvement with an odds ratio of at least 2 and a lower 95%
4 confidence limit greater than 1.

1 25. (New) The method of claim 23, further comprising generating a report
2 indicating the presence or absence in said individual of said fibrostenosis-predisposing allele.

1 26. (New) The method of claim 23, further comprising generating a report
2 indicating the presence or absence in said individual of said clinical subtype of Crohn's disease
3 characterized by fibrostenosing disease independent of small bowel involvement.

1 27. (New) The method of claim 23, wherein determining the presence or
2 absence of said fibrostenosis-predisposing allele comprises enzymatic amplification of nucleic
3 acid from said individual.

1 28. (New) The method of claim 27, wherein said amplification is polymerase
2 chain reaction amplification.

1 29. (New) The method of claim 28, wherein said polymerase chain reaction
2 amplification is performed using one or more fluorescently labeled probes.

1 30. (New) The method of claim 28, wherein said polymerase chain reaction
2 amplification is performed using one or more probes comprising a DNA minor groove binder.